

Claim amendments

1. (Previously presented) A method of re-evaluating an order of a plurality of ads, the method comprising:

a client receiving from a remote server the plurality of ads and a plurality of ad control files, wherein each of the ad control files is associated with a respective ad of the plurality of ads, wherein at least one of the ad control files includes a trigger parameter, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

the client determining the respective weight value for each ad that is associated with a respective weight value, wherein the client uses a weight rule contained in the ad control file associated with the ad so as to determine the weight value associated with the ad, and wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed;

the client maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads; and

the client updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter the client re-evaluating the order of the plurality of ads to determine a next ad to be displayed,

wherein the order of the plurality of ads is indicated by a data structure, and

wherein the client re-evaluating the order of the plurality of ads includes (i) for each of the at least one of the ads associated with a respective weight value, the client multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) the client placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

2. (Previously presented) The method of claim 12, wherein the change of viewing context in the client reflects a change in a video stream being viewed by a user of the client.

3. (Previously presented) The method of claim 2, wherein the change of viewing context in the client includes a channel change.

4. (Cancelled)

5. (Previously presented) The method of claim 1, wherein re-evaluating the order of the plurality of ads includes re-ordering the data structure, and wherein the data structure contains pointers to ads of the plurality of ads.

6. (Cancelled)

7. (Previously presented) The method of claim 1, wherein re-evaluating the order of the plurality of ads further includes evaluating an interpreted placement rule for at least some of the ads.

8. (Original) The method of claim 1, wherein the client is a video replay system.

9-10. (Cancelled)

11. (Previously presented) The method of claim 1, wherein the next ad to be displayed is an ad at the top of the data structure after re-evaluating the order of the plurality of ads.

12. (Previously presented) The method of claim 61, wherein receiving the ad request includes receiving the ad request asynchronously to receiving a notification of a change of viewing context in the client.

13. (Previously Presented) The method of claim 61, wherein sending the determined next ad to be displayed includes sending an ad on the top of the data structure.

14. (Previously Presented) The method of claim 61, wherein sending the determined next ad to be displayed includes sending a next ad having a highest

weighted placement value in accordance with a placement rule and a weight rule of the ad.

15. (Previously Presented) The method of claim 61, further comprising:
re-evaluating the ordering of the plurality of ads after an ad is returned in response to the ad request.

16. (Cancelled)

17. (Original) The method of claim 1, wherein the next ad to be displayed is a full-page ad.

18. (Original) The method of claim 1, wherein the next ad to be displayed is a banner ad.

19. (Previously Presented) The method of claim 1, wherein the next ad to be displayed is an ad displayable in a predetermined location on a display device.

20. (Previously presented) The method of claim 1, wherein each ad of the plurality of ads has an associated rule set containing a placement rule and at least one local parameter value.

21. (Previously presented) The method of claim 1, wherein at least one ad of the plurality of ads has an associated placement rule.

22. (Cancelled)

23. (Previously presented) The method of claim 1, wherein at least one ad of the plurality of ads has an associated expiration rule.

24-30. (Cancelled)

31. (Previously Presented) The method of claim 61, further comprising:
at the client, entering a pause mode to pause currently viewed programming,
wherein sending the determined next ad includes sending the determined next ad
when the client enters the pause mode.

32-37. (Cancelled).

38. (Previously presented) A method of displaying an ad on a client-side machine, comprising:

storing a plurality of ads on the client-side machine, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

the client-side machine receiving from a remote server a plurality of ad control files, wherein each of the ad control files is associated with a respective ad of the plurality of ads, and wherein at least one of the ad control files includes a trigger parameter;

the client-side machine determining the respective weight value for each ad that is associated with a respective weight value, wherein the client-side machine uses a weight rule contained in the ad control file associated with the ad so as to determine the weight value associated with the ad, and wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed;

the client-side machine maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads; and

the client-side machine updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter

the client-side machine re-evaluating an order of the plurality of ads so as to determine a next ad to be displayed; and

displaying the next ad to be displayed when the client-side machine encounters an ad display opportunity,

wherein the order of the plurality of ads is indicated by a data structure, and

wherein the client-side machine re-evaluating the order of the ads includes: (i) for each of the at least one of the ads associated with a respective weight value, the client-side machine multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) the client-side machine placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

39. (Previously Presented) The method of claim 38, wherein the ad display opportunity occurs when a user pauses a currently viewed program.

40-60. (Cancelled)

61. (Previously presented) The method of claim 1, further comprising:
receiving an ad request from a requesting application; and
in response to receiving the ad request, sending to the requesting application the determined next ad to be displayed.

62. (Previously Presented) The method of claim 1, wherein the data structure is a heap data structure.

63. (Previously Presented) The method of claim 38, wherein the data structure is a heap data structure.

64-67. (Cancelled)

68. (Previously presented) The method of claim 1, wherein at least one trigger parameter of the trigger table is associated with two or more ads.

69. (Previously presented) The method of claim 1, wherein a trigger parameter of the plurality of trigger parameters is selected from the group consisting of (i) a parameter that indicates time of day, (ii) a parameter indicating day of week, (iii) a parameter indicating day of month, (iv) a parameter indicating day of year, and (v) a parameter indicating month of year.

70. (Previously presented) The method of claim 1, wherein at least one ad control file of the plurality of ad control files is encoded in XML format.

71. (Previously presented) The method of claim 1, wherein each of the ad control files comprises a rule set that describes the ad associated with the ad control file.

72. (Previously presented) The method of claim 71, wherein a rule set of a given ad control file comprises a rule for determining an expiration date of the ad associated with the ad control file.

73. (Previously presented) The method of claim 38, further comprising:

after displaying the next ad to be displayed, logging information at the client-side machine, wherein the logged information indicates that next ad to be displayed has been displayed, and

passing the logged information from the client-side machine to a server that provided the plurality of ads to the client-side machine.

74. (Currently amended) The method of claim 1,

wherein each ad control file includes an ad placement value rule, and

wherein re-evaluating the placement value of each ad is carried out in accordance with the ad placement value rule in the ad control file associated with the ad.

75. (Currently amended) The method of claim 38,

wherein each ad control file includes an ad placement value rule, and

wherein re-evaluating the placement value of each ad is carried out in accordance with the ad placement value rule in the ad control file associated with the ad.

76-77. (Cancelled)

78. (Currently amended) The method of claim 1, wherein the client receives the plurality of ads and the plurality of ad control files from a remote server.

79. (Currently amended) The method of claim 38, wherein the client receives the plurality of ads and the plurality of ad control files from a remote server.

80. (Previously presented) The method of claim 1,
wherein each respective weight value for at least one of the ads is a constant weight value.

81. (Previously presented) The method of claim 38,
wherein each respective weight value for at least one of the ads is a constant weight value.

82-83. (Cancelled)

84. (Previously presented) The method of claim 1, wherein the equation for calculating the weight value comprises a variable time parameter.

85. (Previously presented) The method of claim 84, wherein the variable time parameter is specified in epoch seconds.

86. (Previously presented) The method of claim 38, wherein the equation for calculating the weight value comprises a variable time parameter.

87. (Previously presented) The method of claim 86, wherein the variable time parameter is specified in epoch seconds.

88. (Previously presented) The method of claim 72, wherein the rule for determining the expiration date of the ad comprises an equation including a variable time parameter.

89. (Previously presented) The method of claim 88, wherein the variable time parameter is specified in epoch seconds.